



## Product Features

- as a central domestic hot water heater according to the continuous flow principle
- copper soldered stainless steel plate heat exchanger
- includes thermal disinfection option according to DVGW W 551
- integrated pump for primary side (heating)
- pulse train controlled pump
- materials suitable for drinking and heating water
- lime scale protection due to patented tilted position of plate heat exchanger
- to control hot water heating and reloading of buffer tank
- integrated MASTER/SLAVE method for cascade rotation
- for hygienic supply of hot water and hot water circulation according to latest standards
- wetted parts on the drinking water side made of gunmetal, stainless steel and drinking water approved plastics
- wetted parts on the heating side made of gunmetal, stainless steel, cast grey iron and brass
- plate heat exchanger made of stainless steel grade 1.4401/1.4404
- includes option to compensate for offset in walls
- insulating shell made of EPP with separated hot and cold areas to avoid heat loads on the cold water and protect the controller and pump electronics from high temperatures
- with patented chimney effect to make efficient use of the pump life
- Adaptive controller for high control quality
- includes two temperature sensors with 7 metres pipe length for mounting on the buffer tank
- Up to 8 devices possible
- standard BMS compatibility via RS485 interface (Modbus-RTU)
- with patented measuring track to detect volume flow from 1.6 l/min
- includes two vortex flow sensors with integrated 2-wire Pt1000
- includes 10 bar pressure relief valve installed at factory
- sample valve can be retrofitted
- includes four DN 32 quarter turn stop valves with insulation shells
- flush point can be integrated to avoid stagnation in the cold-water pipe in the case of interruptions in operation
- Connection to power supply with type F safety plug
- includes 32 GB data logger to fulfil operator's obligations
- includes commissioning wizard
- includes optimisation function with suggestion for reducing the flow temperature to save energy
- includes sensor for detecting the return temperature
- control range for 60°C drinking water from 2 K overtemperature
- additional sensors can be connected for detecting the cold water and circulation entry temperature
- adjustable hot water temperature for pipework contents < 3 l up to 30°C optional
- with the option of BACNet connection

## Standards and Approvals

- according to accepted materials list from German environmental agency
- building material class B2 according to DIN 4102
- CE marking
- VDE declaration of conformity
- RoHS approval

### Technical data

- adjustable temperature range for PWH 30°C to 70°C
- adjustable temperature range for thermal disinfection 70°C to 90°C
- max. operating temperature primary side 95 °C
- max. operating temperature secondary side 80 °C
- max. working pressure 1 MPa
- given abstraction rates at PWH = 60°C with PWC = 10°C and water temperature in buffer tank = 80°C
- Water content per fresh water station (drinking water side) Appliance M = 2.48 litres, appliance L = 3.53 litres
- Water content per fresh water station (heating side) Device M = 2.23 litres, Device L = 3.28 litres

Part no.	cascade	min. abstraction rate (l/min)	max. abstraction rate (l/min)	capacity (KW)	A1	H1 (mm)	H2 (mm)	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)	L5 (mm)	T1 (mm)	T2 (mm)
9152010100	single unit M	1.6	75	262	G 1 1/2	749	687	550	320	71	215	94	388	83
9152000200	2-stage cascade M	1.6	150	524	G 1 1/2	749	687	550	320	71	215	94	388	83
9152000300	3-stage cascade M	1.6	225	786	G 1 1/2	749	687	550	320	71	215	94	388	83
9152000400	4-stage cascade M	1.6	300	1048	G 1 1/2	749	687	550	320	71	215	94	388	83
9152000500	5-stage cascade M	1.6	375	1310	G 1 1/2	749	687	550	320	71	215	94	388	83
9153010100	single unit L	1.6	120	418	G 1 1/2	749	687	550	320	71	215	94	388	83
9153000200	2-stage cascade	1.6	240	836	G 1 1/2	749	687	550	320	71	215	94	388	83
9153000300	3-stage cascade	1.6	360	1254	G 1 1/2	749	687	550	320	71	215	94	388	83
9153000400	4-stage cascade	1.6	480	1672	G 1 1/2	749	687	550	320	71	215	94	388	83
9153000500	5-stage cascade	1.6	600	2090	G 1 1/2	749	687	550	320	71	215	94	388	83

Part no.	electr. capacity consumption (W)	kv-value primary circle	flow coefficient value secondary circle	kg
9152010100	145	7.1	7	56.00
9152000200	290	14.2	14	112.00
9152000300	435	21.3	21	168.00
9152000400	580	28.4	28	224.00
9152000500	725	35.5	35	300.00
9153010100	194	10.2	9.4	62.00
9153000200	388	20.4	18.8	124.00
9153000300	582	30.6	28.2	186.00
9153000400	776	40.8	37.6	248.00
9153000500	970	51	47	330.00

### Accessories

- gunmetal sampling valve, figure 187 00
- KHS Flush Point, 230 V, figure 684 04

### Spare parts

- drain valve made of gunmetal/plastic, figure J7109 173 00
- inner top part for KHS quarter turn stop valves with actuator, figure E0120 686 00
- KHS quarter turn stop valve without servo drive, figure 686 0G
- actuator 230V for KHS quarter turn stop valves, figure 686 00 005/006